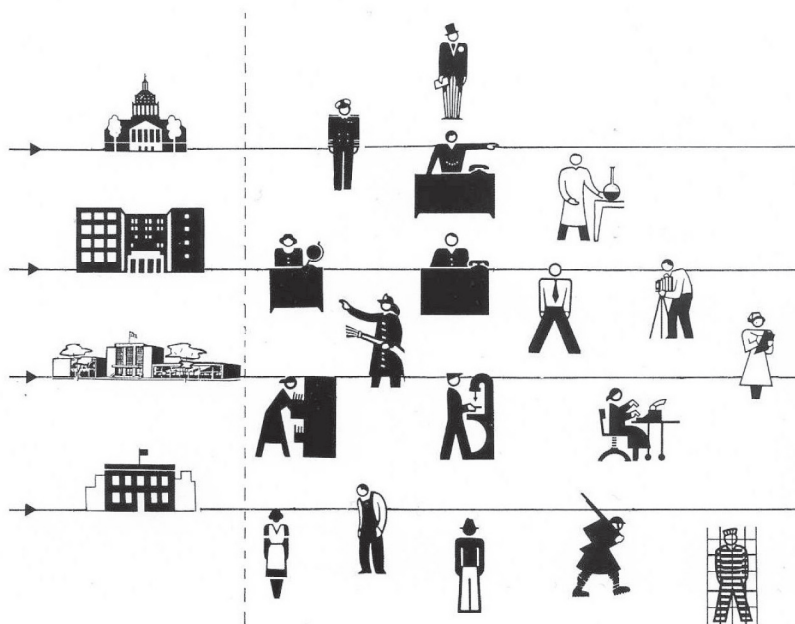


**Allan Sekula**  
***School Is a Factory***



*Our schools are, in a sense, factories in which the raw materials are to be shaped and fashioned into products to meet the various demands of life. The specifications for manufacturing come from the demands of the twentieth-century civilization, and it is the business of the school to build its pupils to the specifications laid down.*

Elwood Cubberly, Public School Administration, 1916

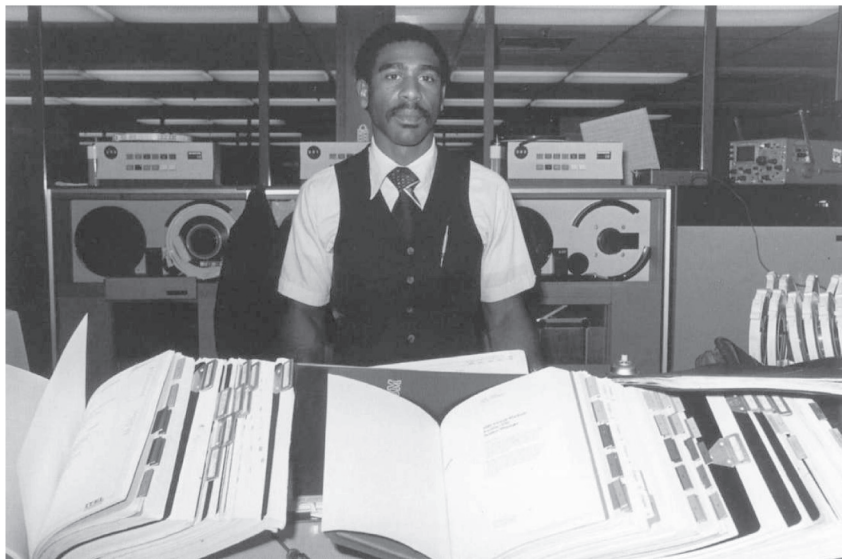




This photograph was taken at a community college in Southern California, as were all the following pictures of school situations. Three welding students pose for a portrait. They hope to graduate into Jobs with metal fabrication shops in the area. Their instructors act like bosses, supervising the action from a glassed-in office. This apprenticeship program, like public education generally, is supported by taxes that fall heavily on working people and only lightly on corporations. Spared the cost of on-the-job training, local industry profits from the arrangement. Social planners also like the idea that vocational courses keep unemployed young people off the streets and dampen discontent. A lot of Hispanic and black students are tracked into these courses. Despite such programs, unemployment continues to increase as industry cuts back production and moves its operations to the nonunionized labor markets of the South and to the Third World. These students may never find steady work as welders.



Two students look up from their machines. They are learning key-punch operation in a business information systems course. This junior college delivers a lot of students, mostly women, to surrounding corporations with a need for clerical and low-level computer workers. Keypunch is the lowest level of computer work, rivaling the assembly line in its brain-numbing routine.



In the room next to the women keypunch students, a computer programmer stops for a moment, smiles, then looks solemn. I don't talk to him much, but later a friend, a union activist at the college, tells me a story about programmers. Most move frequently from job to job, since their skills are in high demand. Some are active in the faculty-staff union, which is auditing the financial records of the college in an attempt to prove that the administrators and not the workers are responsible for a serious budget crisis. Some programmers know that the computer records have been deliberately altered to obscure illegal administrative expenses. They know how to help open the books, and they know the risks involved. This may or may not be a true story or a lesson in resistance.



A businessman holds a plastic schoolhouse, a funnel full of figurines, and a good cigar in front of one of the many computer firms in this region. The streets are named for famous scientists, inventors and industrialists. Even maps celebrate the fusion of organized science and big business. One can stand at the intersection of Dupont and Teller and think, or not, about the march from gunpowder to the hydrogen bomb.

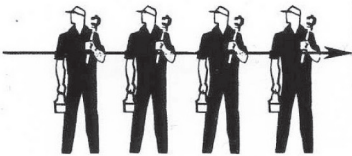


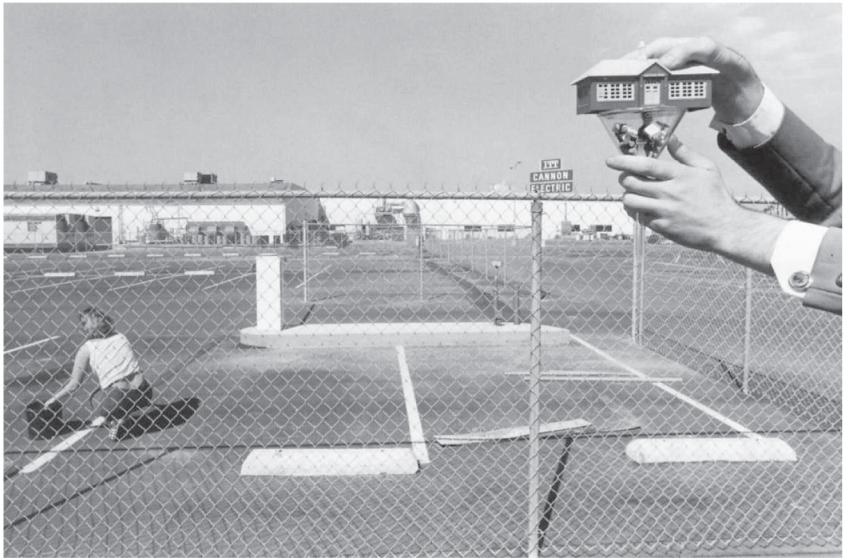


A mathematics instructor quizzes his students. Most of them are taking math for practical, vocational reasons. Very few, if any, will get to be scientists, engineers, or mathematicians. This is not a matter of talent or ability, but a matter of social channeling. There are more prestigious schools for the higher professions.



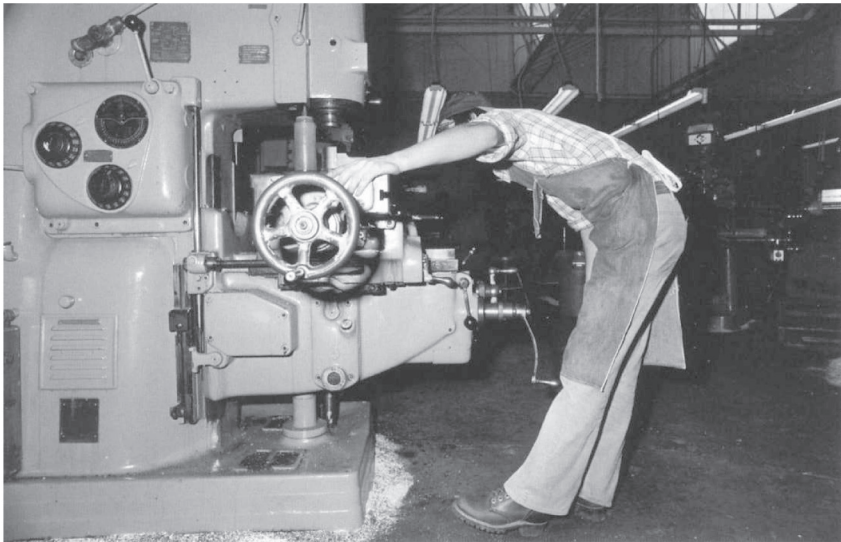
A half-abandoned shopping center, only minutes away by car from the college scenes you've been looking at.





Funny things happen in this landscape of factories disguised as parks. Corporate executives decide to relocate their plants, often moving from the Hispanic or black inner districts to the orange groves near the coast. Now, these managers drive only a short distance from their beach-front homes to their work. But somehow real-estate interests and manufacturing interests come into conflict. Things are not working smoothly here under the palm trees. Escalating property values make it impossible for lower and middle level employees to find housing. So now a new, less privileged group of commuters join the traffic on the freeways of Southern California, cursing and dreaming their long way to work.





This student runs a milling machine. He studies machine technology and business administration, hoping to own his own machine shop one day. Around him are newer computer-controlled milling machines, machines which require less graceful, careful attention but rather a nervous, jerky movement between the machine and the punched tape which controls the machine. Working near him in this big room are many Vietnamese refugees, some of whom will become machinists in the military production plants in the area.

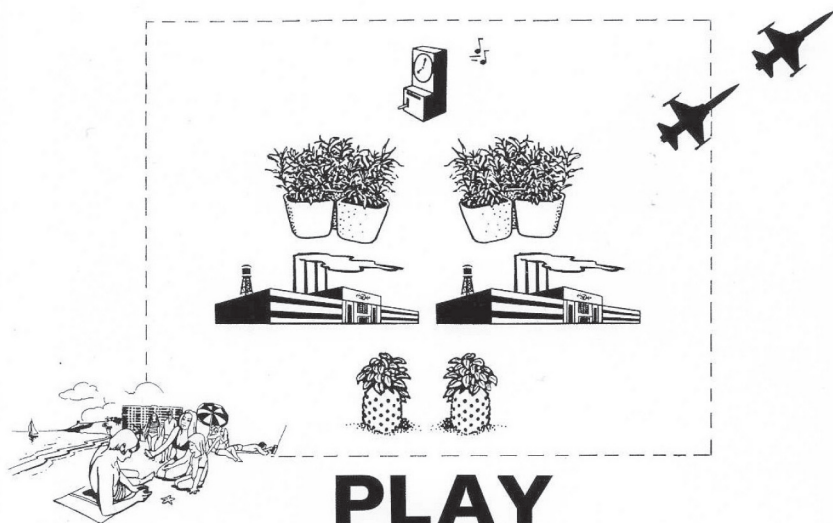


One of my students, a welder, had worked in a large shipyard in Los Angeles harbor, but poor wages, periodic layoffs, and danger drove him to a better-paying job at Disneyland. Now, instead of building bulkheads for Navy frigates and repairing oil tankers, he constructs the hidden skeleton of an amusement park, commuting to the night shift after class. He remarks drolly on the button-down fun-loving ethos of the place, and on the snobbery directed at Disneyland's manual workers by the college students who serve as guides and performers. So he prefers the solitary nighttime work, welding as the fog rolls in from the Pacific, softening the contours of Fantasyland and obliterating the artificial peak of the Matterhorn.





**WORK**



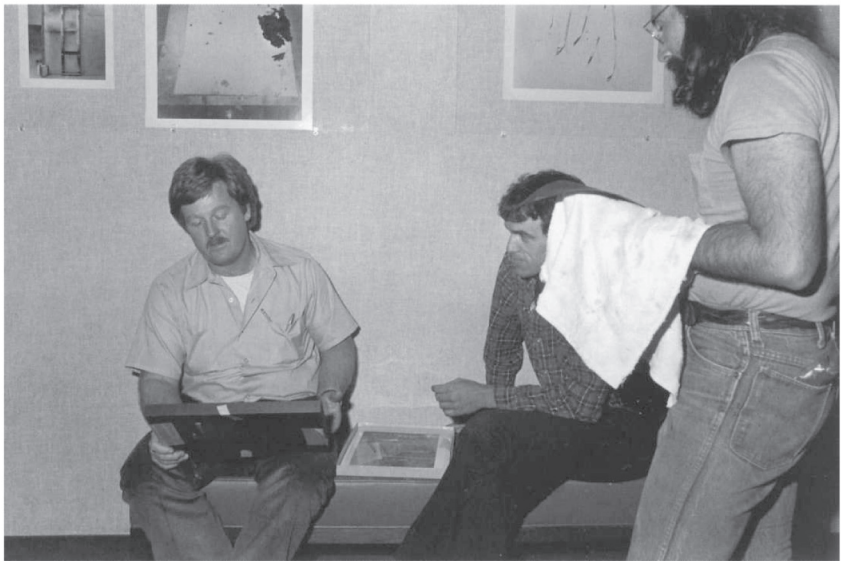
**PLAY**



Four male commercial photography students inspect a camera in front an exhibit of a well-known woman art photographer's work, prints with vegetable-erotic overtones. Most commercial photography students learn to concentrate on technical matters. Nevertheless, their instructors periodically expose them to privileged examples of the beautiful.



A male biology instructor looks on as a female student pours a chlorophyll solution into a funnel. More than half of the students at this college are women, while the faculty is predominantly male (and white).



This photograph was taken in a space that serves both as a gallery and as a darkroom foyer for a large photography department. A well-known photographer sits in front of an exhibit of his own color prints. He critically inspects a student's work while a second student, holding an unwashed print on a towel, looks on. Although some students from this department land commercial photography jobs, very few, if any become exhibiting fine art photographers.



A film critic drives a cab in New York City. He was a working-class kid who managed to attend the creative writing program of an elite university. Since his writing tends to deal with the politics and ideology of Hollywood movies, he's not well paid for his efforts, and publishes in a collectively edited film journal.





An artist paints her loft, an abandoned yeshiva in a Chinese neighborhood on the Lower East Side of New York City. She works as a clerk, and barely makes ends meet. Although she's in her late thirties, she's considered a "young artist" because she's just begun to be noticed by curators and critics. Six months after her first one person show at a Fifty-seventh Street gallery, she mysteriously disappears from the art world.



Not far from Disneyland, an art museum stands at the edge of a huge "exclusive" shopping center. The trustees of the museum are aerospace executives, bankers, and fast food and car wash kings. As collectors, they seem to favor Pop Art and minimal painting and sculpture. Art instructors from the community colleges bring their students to the museum to see the latest trends.



**7—TELEVISION ANNOUNCING I (3-3) CSU**

*Prerequisite:* Speech 3 and Television II and 46 with grades of "C" or better, or by examination.  
*Required of all TV broadcasting majors.*

Training in radio and television announcing for newscasts, ad-libbing, commercials, sportscasts, and various program performance assignments with emphasis on the development of the student's individual style and personality. Practice in presenting the "personal you" over the mike and to the TV camera.

*Los Angeles City College General Catalog, 1978-79*

**Beginning Video/Performance**

Howard Fried  
class defies description  
teacher defies description  
teacher defies class description

teacher defies convention  
students defy conventions  
students defy conventions teacher

art defies authority  
revolution defies authority  
art defies revolutionary authority

*San Francisco Art Institute College Catalog, 1979-81*

*In the midst of standardized and administered human units, the individual lives on. He is even placed under protection and gains monopoly value. But he is in truth only the function of his uniqueness, a showpiece like the deformed who were stared at with astonishment and mocked by children. Since he no longer leads an independent economic existence, his character falls into contradiction with his objective social role. Precisely for the sake of this contradiction, he is sheltered in a nature preserve, enjoyed in leisurely contemplation.*

Theodor W. Adorno, *Minima Moralia*, 1951

**13—WORKSHOP IN THE ANIMATION FILM (4-4) O**

*Prerequisite:* Cinema 1 and 2 with grades of "C" or better, or by permission of instructor. Equipment deposit, \$10.00

*Required of Cinema majors.*  
Laboratory, 10 hours.

An introduction to the theory and practice of animation. An examination of the different types of animation, and the creative use of titles in films. Emphasis on design, timing and the technical possibilities of the camera. Drawing skill is not essential.

*Los Angeles City College General Catalog, 1978-79*

## 800 Film Cartoonists Threaten Strike

### Walkout Planned Monday Over Work Being Sent Overseas

**BY TIM WATERS**  
*Times Staff Writer*

Hanna-Barbera declined to comment on the matter, but the producers who are talking admit that much work is being moved overseas. And they also estimate a studio can generally cut total production costs nearly 50% by having the work done in Korea, Spain, Taiwan, Australia and other countries.

The local, which is a member of the International Alliance of Theatrical and Stage Employees, was given the authority to call a strike by its members Aug. 1. It was the first time members have authorized a strike over the loss of work, although the leadership has twice before asked them to do so.

Hester attributed this to a new activist spirit within the union, especially among the younger women, who compose the majority of the local's technical workers.

"Now, without a doubt," he said, "nine-tenths of our women are self-supporting. Before, most of them were married and they accepted the five or six months of unemployment and then collected their unemployment checks. Now we have a lot more women who need a steady paycheck coming in."

*Los Angeles Times, August 11, 1979*



This photograph was taken at a Hilton Hotel in Los Angeles. An avant-garde artist and tenured professor at a university in Southern California interviews a less well-known artist for a teaching position. Since she's female and Hispanic, the mere fact of the interview satisfies affirmative action requirements. She doesn't get the job.



***School Is a Factory***

## I. The Politics of Education and the Traffic in Photographs

The arguments made here take us to a problematic intersection in advanced capitalist society, that of "higher" education and the "culture industry."<sup>1</sup> I suspect that you and I are situated, as social actors, in that intersection, maybe directing traffic, maybe speeding through, maybe hitchhiking, maybe stalled, maybe in danger of being run over. I am interested here in speaking to whatever comforts or discomforts you might feel by virtue of the way these highways have been engineered into a larger social geography. This essay is a deliberate provocation, less an intervention from some fictitious "outside" than an argument from within.

In the "developed" world, school and the media bring a formidable play of forces to bear upon the self, transforming and supplanting the more traditional patriarchal authority that emanated from religion and family in the epochs of feudalism and entrepreneurial capitalism. Both mass schooling and mass media are developments intrinsic and necessary to the corporate capitalist world order that emerged in the very late nineteenth and early twentieth centuries. In the United States, the decade after the First World War saw the triumph of a new national culture, a "business" culture, reproduced through compulsory education and promulgated by mass circulation periodicals, radio and the movies. These forces sought to organize people as atomized "private individuals," motivated en masse by the prospect of consumption, thus liquidating other dangerously oppositional forms of social bonding based on class, sex, race and ethnicity.

We have been led by the champions of corporate liberalism to believe that schooling and the media are instruments of freedom. Accordingly, these institutions are seen to fulfill the democratic promise of the Enlightenment by bringing knowledge and upward social mobility within reach of everyone, by allowing each individual to reach his or her own limits. This ideology hides the relentless sorting function performed by school and media. Both institutions serve to legitimate and reproduce a strict hierarchy of power relations, tracking individuals into places in a complex social division of labor while suggesting that we have only ourselves to blame for our failures. School and the media effectively situate most people in a culture and economy over which



they have no control, and thus are mechanisms by which an "enlightened" few promote the subtle silencing of the many.<sup>2</sup>

School and the media are inherently discursive institutions, sites within which discourse becomes a locus of symbolic force, of symbolic violence. A communicative relation is established between teacher and student, performer and audience, in which the first part, as the purveyor of official "truths," exerts an institutional authority over the second. Students and audience are reduced to the status of passive listeners, rather than active subjects of knowledge. Resistance is almost always limited only to the possibility of tuning out. Domination depends on a monologue of sorts, a "conversation" in which one party names and directs the other, while the other listens deferentially, docilely, resentfully, perhaps full of suppressed rage. When the wholly dominated listener turns to speak, it is with the internalized voice of the master. This is the dynamic of all oppressions of race, gender, and class. All dominating power functions semiotically through the naming of the other as subordinate, dependent, incomplete as a human being without the master's discipline and support. Clearly, such relationships can be overthrown; the discourse of domination finds its dialectical antagonist in a discourse and practice of liberation. Like home, factory, prison and city streets, school and the media are sites of an intense, if often covert, daily struggle in which language and power are inextricably connected.<sup>3</sup>

Most of us who have managed to develop a professional relation to the traffic in words and images (as artists, writers, or teachers) share, often unequally and competitively, in a *symbolic privilege* which situates us above whole populations of the silenced and voiceless. This role, the role of cultural mouthpiece, normally partakes in the privileging and accreditation of its own status, and that of its patrons and employers, while suggesting that culture exists for everyone, or for its own sake. A contradiction has developed between the bureaucratic and professional organization of all cultural work and the Janus faced mythology of culture, which suggests, on the one hand, that mass culture is popular and democratic, while arguing, on the other, that high culture is an elite activity, an Olympian conversation between genius and connoisseur. High culture is increasingly no more than a specialized and pretentious variant of mass culture, speaking to an audience composed of

the upper class and the intermediary strata of professionals and managers (and especially those professionals and managers whose business is culture). The star system prevails in both SoHo and Hollywood: all culture becomes publicity, a matter of exposure.<sup>4</sup>

But artists and intellectuals do not control the interlocking apparatuses of culture and education. Increasingly they are the functionaries and employees of corporate and state institutions: primarily as teachers and grant recipients. The ideology of autonomous professionalism serves to legitimate and defend career interests while, particularly in the case of artist teachers, building on a hollow legacy of romantic individualism. Although the myth of the lonely oppositional path retains its redemptive ideological force, artists are forced into a dreary upwardly mobile competition for visibility, with reputation translating into career capital. Those who refuse or fail are officially invisible, without voice. (I once heard a well known artist characterize less well known artists, generally, as lazy.)

The case of photography is especially poignant in this regard, since historically the medium has been central to the development of mass culture, with its necessary industrialization and proletarianization of much of cultural work. The dominant spectacle, with its seductive commodities and authoritative visual "facts," could not exist without photographs or photographers. Treated by the vigorous new art history of photography to an expanding pantheon of independent auteurs, we forget that most photographers are detail workers, makers of fragmentary and indeterminate visual statements. These photographs take on a more determinate meaning as they pass through a bureaucratically organized and directed process of assembly. The picture magazine is a case in point. Even the curated fine art exhibition, such as John Szarkowski's "definitive" *Mirrors and Windows* at the Museum of Modern Art, may be another. A bureaucratized high culture needs to celebrate the independent creative spirit while functionally eroding the autonomy of the artist.

If school is a factory, art departments are industrial parks in which the creative spirit, like cosmetic shrubbery or Muzak, still "lives." Photographic education is largely directed at people who will become detail workers in one

sense or another. Only the most elite art schools and university art departments regularly produce graduates who will compete for recognition as fine artists. Nonetheless, the ideology of auteurism dominates the teaching of the medium's history at all levels of higher education, even in the community colleges. This auteurism actually oscillates in and out of view, sharing prominence with its opposite, technological determinism. Students learn that photographic history is driven by technical progress, except in some cases, when history is the elevated product of especially gifted artists, who are to be admired and emulated. Very few teachers acknowledge the constraints placed on their would be auteurs by a system of educational tracking based on class, race, and sex.

Thus, most of us who teach, or make art, or go to school with a desire to do these things, are forced to accept that a winner's game requires losers. One can either embrace this proposition with a social Darwinist steeling of the nerves, or pretend that it is not true while trying to survive anyway. Otherwise we might begin to work for a method of education and a culture based on a struggle for social equality.

## II. Photographing School

Between 1976 and 1979, I was employed as a part time junior college instructor in one of the largest photography departments in the United States, teaching the history of photography to night students. These two year "community" colleges constitute the lowest level of higher education in the United States, serving as training camps for technical, service, and lower level administrative workers, and as "holding tanks" for high school graduates who would otherwise flood the labor market. These institutions have developed since the end of the Second World War.

Most of my students worked: as technicians, as postal clerks, electronics assemblers, fast food workers, welders, social workers, high school teachers, and as housewives and mothers. A few retired people took courses. Many students had an amateur interest in the medium. Some night students would jokingly rate the classroom events against what they had missed on television. A good number of the younger students entertained serious thoughts about a career in photography, although many were confused, uncertain about the path to take, knowing that a community college education was not enough. Generally, the committed photography students felt a certain vague pride, feeling that the reputations their instructors

claimed made this department a better one than most in two year colleges. Since a number of faculty members exhibited locally and nationally, this suggested that perhaps the students, too, were on the right track. For the most part, though, the students were learning to become image technicians. Their art historical education was icing on a cake made of nuts and bolts. I tried to teach a different history of photography, one that called attention to the historical roots of this contradiction. *School Is a Factory* emerges from the problems I encountered in teaching.

I was asked to exhibit some of my photographs in a gallery run by the students. The space intrigued me not for formal reasons, but because of its dual uses, mixing both an esthetic and a technical pedagogy, while also serving as a convenient student hang out. The work of reputable art photographers hung on the walls, almost all of it in the fine print tradition of photography. The gallery also served as a foyer to the student darkrooms, the spaces in which purely technical concerns prevailed. I decided that the appropriate thing to do in such a space was a kind of internal critique – a questioning, fragmentary at best – moving outward from photographic education, to community college education, to the larger political economy which motivated the educational system, and then moving back to the immediate environment in which the students were situated. A sound track provided a background of anti Muzak, beginning with mechanically seductive disco music and ending with the flat, deadened rebelliousness of a new wave version of "Summertime Blues" recorded by the Flying Lizards. Most of the students seemed to like the Flying Lizards part a lot. The intermediary material on the tape was vocal, punctuated with the loud ticking of a darkroom timer. A monotonous monologue goes on about a "sanitary landscape," about "factories disguised as parks," while shifting suddenly to the authoritarian, double binding voice of the institution itself: "Learn to earn, work, don't work, play, don't play. Everyone is looking at you, no one is looking at you. . . ."

But it is impossible to question authority without questioning the language of authority. These photographs are intended to work against the typical lyricism of college catalogue photography, with its celebration of joyful encounters between individuated students and the environment, objects, instruments and agents of knowledge: manicured and shaded lawns,



dissected frogs, microscopes, and gesticulating professors. So I have adopted the hard flash light and the single point perspective appropriate to a rationalized, bureaucratically administered environment which is trying to pass itself off as the site of collegial pleasures and self discovery. But it seemed important also to work against the prevailing formalism and other-worldliness of art photography, the hegemonic mannerism of a professionalized avant garde that has turned in upon itself. I wanted to suggest that it is possible for art to deal critically with the social ground on which we stand, to speak of people's experiences in terms other than those dictated by individualism. This project involved a break with the cult of the self sufficient visual image. I am not suggesting that this break necessitates a reversion to some rigid, positivist version of documentary characterized by an obsession with the "facts" overlaid with liberal humanist "values." It would be a mistake therefore to assume that the captions bring a clarifying or restricting sociological facticity to these photographs. Both words and pictures constitute arguments, operating at different levels of specificity, about the prevailing, rather than the idiosyncratic effects of education upon students. Although I am concerned here with the rule rather than the exception, the photographed moments are in no way evidence of an iron determinism at work. I cannot speak for the inner experience, ambitions, or future of the students and teachers who posed for me. The serious looks are as much evidence of guarded caution as anything else, since our brief interactions in the midst of business as usual did not provide much time for explanation. Most administrators assumed that a photographer was a potential publicist, rather than a critic, of their domain. Students were understandably reluctant to contribute to the image of the "happy scholar" and I did not coax them.

I am well aware that this project violates a normal separation of tasks which demands that photographers restrict their activity to the field of the visual, and to the cultivation of esthetic effects. The either or ism that rules this separation suggests that either one makes pictures, which speak from and to the emotions, or one writes, speaking thus to the intellect. But neither words nor pictures speak exclusively to one "faculty" or another; this separation is a triumph of a specifically bourgeois psychology and philosophy of mind, enacted in the rigid division of mental labor within the culture industry.

### III. An Open Conclusion

The celebration, by ruling class commissions, of universal art education, of art education as the "Fourth R" in a revamped, redecorated system of schooling, must be questioned when the same ruling class is promoting educational cutbacks at the same time.<sup>5</sup> When functional literacy rates are declining, what does it mean to promote a massive shift of educational attention to the development of the esthetic faculties? This plan reads like a technocratic perversion of the liberating pedagogy envisioned by the German romantic poet Schiller in his 1793 letters *On the Aesthetic Education of Man*.<sup>6</sup> The estheticism encouraged by the cultural bureaucrats of the 1980s stops short of a necessary integration with critical consciousness. Rather, what seems to have taken shape in these plans is a technocratic vision of a society of expressionist units, playing happily as consumers (of less and less) in a world in which political life is increasingly limited to a spectacle of representation. The task of progressive teachers, artists, and students is to critique this vision and combat its further realization, while preserving the awareness that utopian esthetic possibilities must be struggled for as intrinsic to a genuinely democratic future, but cannot be achieved in a society governed by a mechanical and world threatening lust for profit and control.

1980

### Postscript

Here, in retrospect, is a brief historical comment on two pictorial conventions I've sought implicitly to challenge in *School Is a Factory*. Consider two photographs. First, a photograph made in 1900 by the Washington, D.C. commercial photographer Frances Benjamin Johnson. Johnson came to photography from a beaux arts training and an early career as a commercial illustrator. The photograph comes from an album made by Johnson for the Hampton Institute, a vocational college for blacks in Virginia.<sup>7</sup> The caption reads: "Stairway of Treasurer's Residence, Students at Work." The purpose of the album was promotional, serving as an aid to fundraising. Thus the attitude of diligent and industrious servitude exhibited here might have been intended to impress white donors, like the steel manufacturer Andrew

Carnegie, with the promise of converting a supposedly indolent and uneducated rural black population into disciplined, productive, and unrebelling proletarians. That this careful carpentry is being performed on a "bourgeois" interior, on the banisters of the Hampton Institute treasurer's house, is no accident. The Hampton photographs were exhibited as well at the Paris Exposition of 1900, following the presentation of a series of Johnson photographs of the Washington, D.C. city schools at the 1899 Paris Exposition. Many of these earlier photos appeared in a series of pamphlets called *The New Education Illustrated*.

It can be argued that, although less engaged than Jacob Riis and Lewis Hine in direct Progressive Era reform politics, Johnson is an equally important pictorial ideologue of that period. Although most of her work was governed by commercial possibilities, she seems to have touched on some of the principal themes of Progressive Era politics, moving from first generation feminism, on the one hand, to the celebration of American imperialism on the other. Thus she was able to photograph both Susan B. Anthony, the feminist leader, and Admiral Dewey, commander of the victorious American fleet at Manila, in a highly celebratory fashion. Johnson was able in her school photographs to suggest the new spirit of scientific and ameliorative education. (The pragmatist John Dewey can be said to be the principal philosopher of that movement.<sup>8</sup>) Johnson presents the school as a total and encyclopedic institution. But the black schools like Hampton and Tuskegee were limited to vocational ends: this limitation was the source of an intense debate between the reform minded black educator Booker T. Washington and the more radical W. E. B. DuBois, who argued for a black educational system that would include the liberal arts.<sup>9</sup> Thus, what underlies the educational system that Johnson is promoting, both in her photographs of the black institutes and the then largely white public schools of Washington, D.C., is the process of a thoroughgoing division of labor, a division made along racial, and ethnic, lines. Although, relatively speaking, the black institutes were progressive institutions, they accepted the assignment of blacks to a subordinate position, as manual workers, in a society increasingly dominated by intellectual labor. Also, the black institutes attempted to educate for a craft system of production that was disappearing under pressure from industrial centralization and scientific management. Johnson's photographs, with their mix of realism and

scientific management. Johnson's photographs, with their mix of realism and an idealizing and academic neo classical arrangement, are related to what I would call the instrumental realism of late nineteenth century social scientific photography.

Like many psychiatric and criminological albums, these photographs, viewed in sequence in the original album, illustrate the so called disease and its institutional correction and cure: a kind of "before" and "after" narrative structure that in the Hampton album involves the juxtaposition of images of rural southern life with the "improved" conditions of the vocationally educated and industrially disciplined Black. Thus, behind the realist appearance of these images lies the substance of a new rationalized, and abstract, system of bureaucratic command. One could argue that the speaking subject of these photographs is not black people, taken either collectively or individually, but the institution of modern education. I am taking Johnson's photograph here as a model for what followed in virtually every college catalogue published in America. What I wanted to achieve in *School Is a Factory* is a way of turning such conventions inside out, or upside down, to reveal their contradictions.

But just as I am opposed to the optimistic and disciplined realism of the Johnson photograph, so also I have problems with the following example of American late modernist photography. Consider a photograph by Lewis Baltz published in 1975 by Castelli Graphics in an English and German language book called *The new Industrial Parks near Irvine California*.<sup>10</sup> This happens to be the "landscape" in which I taught, the "landscape" within which *School Is a Factory* was made. What seems crucial to Baltz's work, and what makes it an exemplar, along with the work of Diane Arbus, among late modernist photography in the United States, is its fundamental ambiguity in relation to the question of genre. Is this a documentary photograph or an abstraction? Baltz himself makes statements which embrace this ambiguity. And a whole new genre, a genre between genres, has arisen to give this ambiguity its proper place. The American curator William Jenkins has christened this work, along with the much more rigorously typological work of Bernd and Hilla Becher, and that of Robert Adams, Joe Deal, Nicholas Nixon, and others as the New Topographics.<sup>11</sup> These "photographs of a man altered landscape" derive their ambiguity precisely from the absence of the human



figure. (By the way, I am not suggesting that the addition of a human figure would necessarily "humanize" these images.) In the case of Baltz, a depopulated industrial environment provides the source for photographs that seem to aspire to a kinship with late modernist abstract painting. Obviously, art photography is still haunted by the ghost of pictorialism, the need to affiliate itself referentially with painting. Baltz then, is a good example of the so called "loss of the referent" within late modernist culture. (To his credit, Baltz's ambiguity echoes an ambiguity and loss of referentiality already present in the built environment.) Increasingly, one specialized sign system can only refer to itself, or to another specialized sign system. Problems of communication are reduced to problems of self-referentiality, or to problems of translation. I should note that the very term "industrial park" is a linguistic trick, a mystifying translation of a site of production into a site of imaginary leisure. No two terms could be more incompatible, and yet what is suggested by this oxymoronic rhetorical construction is "clean industry," industry without industrialism.

What I hope to criticize here, then, are two related kinds of abstraction. First, we have the abstraction inherent in the supposedly realistic world picture of a bureaucratic, commodity centered society: the abstraction that emerges from the triumph of exchange value over use value, from the triumph of abstract intellectual labor over manual labor, from the triumph of instrumental reason over critical reason. (My thinking on these issues owes a lot to the German philosopher Alfred Sohn Rethel.<sup>12</sup>) The second abstraction is that which emerges from the separation of esthetic culture from the rest of life, the abstraction process central to the career of modernism (and post-modernism), the abstraction that finds an exemplary esthetic freedom in the disengaged play of signifiers. What I hope to substitute for these two powerful tendencies, which correspond roughly to the realms of "applied" and "pure" photography, is for the moment a kind of political geography, a way of talking, with words and images about both the system and our lives within the system.<sup>13</sup>

1The exhibition version of this work, first published in its entirety in Allan Sekula, *Photography Against the Grain*, Halifax, 1984, consisted of a sequence of 19 photographs and captions, intercut with seven graphics panels, from which the 4 current illustrations are taken. An earlier version was published in *Exposure*, Vol 15, Nos. 3-4, Winter 1980. The work can also be found in Allan Sekula, *Performance Under Working Conditions*, Vienna, 2003.

2 Clearly, an adequate account of the developments alluded to in the last two paragraphs would require volumes. Several recent texts come to mind as especially important: Harry Braverman's *Labor and Monopoly Capital*, New York, 1974, and David Montgomery's *Workers' Control in America*, New York, 1979, are about the corporate struggle to seize control of the labor process by means of "scientific management," thereby isolating and deskilling workers; Stuart Ewen's *Captains of Consciousness*, New York, 1976, about the growth of a consumer culture motivated by corporate advertising; Samuel Bowles's and Herbert Gintis' *Schooling in Capitalist America*, New York, 1976, about the historical relation of educational reform to the changing demands of a capitalist economy; and David Noble's *America by Design*, New York, 1977, about the corporate role of science and technology, with an emphasis on the instrumentalization of higher education. David N. Smith's *Who Rules the Universities?*, New York, 1974, is also valuable, as is Allen B. Ballard's *The Education of Black Folk*, New York, 1973, and the hard to find text by the Newt Davidson Collective, *Crisis at CUNY*, New York, 1974.

3 See Paulo Freire's *Pedagogy of the Oppressed*, New York, 1970, for a very important dialectical understanding of the educational process in its dominating and liberating modes. Ira Schor's *Critical Teaching and Everyday Life*, Boston, 1980, does an admirable job of translating Freire's insights concerning peasant societies into terms compatible with the experience of North American working class students. Pierre Bourdieu's and Jean Claude Passeron's *Reproduction*, London, 1977, is theoretically dense but valuable in its attempt at a "theory of symbolic violence" in the pedagogical sphere. Adrienne Rich's essays on education in *On Lies, Secrets, and Silence*, New York, 1979, especially the one entitled "Toward a Woman Centered University," are among the most lucid statements I have read on the radical remaking of educational possibilities, and I am grateful to Sally Stein for directing me to them.

4 Thus there is something revealing about the very title of the journal in which this essay originally appeared. *Exposure* was founded in 1964 as a forum for college teachers of photography. In contrast, *Aperture*, founded in 1953, suggested that the practice of fine art photography involved a small hermetic circle around the guru like figure of Minor White. One entered this circle through the smallest of apertures (f/64?), rather as if through the New Testament 'eye of the needle.' *Exposure* supplanted this inner directed estheticism with a belief in outward oriented professional boosterism appropriate to the mid sixties era of Pop Art and growing college art teaching. Both titles share, however, in a venerable fixation with the techniques and apparatuses of photography. Thus "aperture" unites technologism and spiritualism, while "exposure" unites technologism and an incipient photographic star system, realized in the 1970s.

5 See David Rockefeller, Jr., chairman, *Coming to Our Senses: The Significance of the Arts in American Education* A Panel Report, New York, 1937. See also the ominous remarks by Zbigniew Brezinski, who later became director of the Trilateral Commission and national security advisor to President Carter, on a projected "democracy," based not on the popular ability to influence "policy making," but on "autonomy for individual self expression," in Daniel Bell, ed., "Toward the Year 2000: Work in Progress," *Daedalus*, Summer 1967, p. 687.

6 Friedrich Schiller, *On the Aesthetic Education of Man*, New York, 1977. See also Herbert Marcuse, "The Aesthetic Dimension," in *Eros and Civilization*, Boston, 1955.

7 Frances Benjamin Johnson, *The Hampton Album*, New York, 1966. This Museum of Modern Art

catalogue includes 44 photographs from the original Hampton Institute album, as well as a text by Lincoln Kirstein.

8 John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education*, New York, 1916.

9 In addition to Allen Ballard's *The Education of Black Folk*, see W E B. DuBois, *The Education of Black People: Ten Critiques, 1906 1960*. ed. Herbert Aptheker, New York, 1973. For an amusing and partisan summary of the differences between Washington and DuBois, see Dudley Randall's poem "Booker T. and W E. B.," in *Poem Counterpoem*, Detroit, 1966. Randall was writing during a time of rising black demands for open admission to higher education in the United States.

10 Lewis Baltz, *The new Industrial Parks near Irvine, California/Das neue Industriegelände in der Nahe von Irvine, Kalifornien*, New York, 1975. I am referring here to Plate 47, which we were unable to reproduce.

11 *The New Topographics*, curated with an introduction by William Jenkins, International Museum of Photography at George Eastman House, Rochester, 1975.

12 Alfred Sohn Rethel, *Intellectual and Manual Labor: A Critique of Epistemology*, London, 1978.

13 Twenty-three of the pictographs used in the graphics were taken from Rudolf Modley's *Handbook of Pictorial Symbols*, New York, 1976. These pictographs were designed under Modley's direction in the thirties and forties, following precedents from the twenties designed by the artist Gerd Arntz under the direction of Otto Neurath at the Gesellschafts-und-Wirtschaftsmuseum, Vienna. The remaining pictographs were taken from American commercial sources from the seventies.

